

Fig.2A

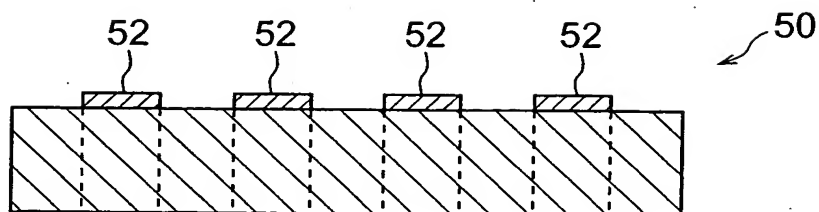


Fig.2B

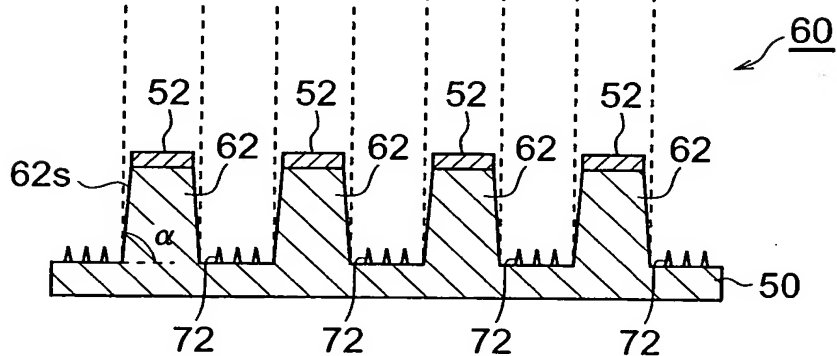


Fig.2C

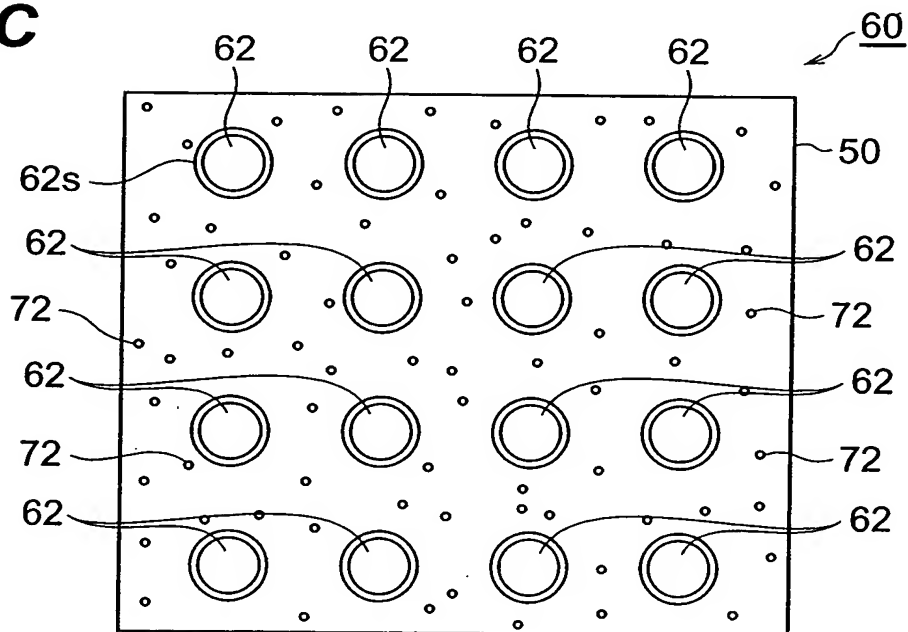


Fig.3A

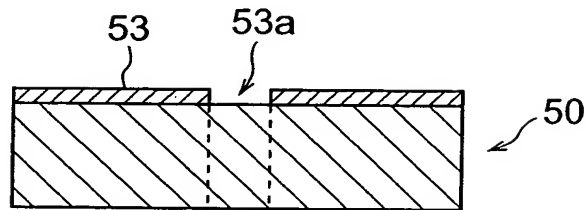


Fig.3B

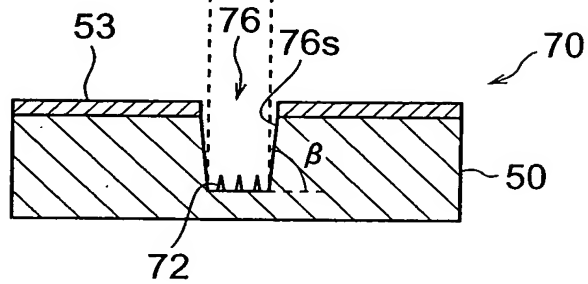


Fig.3C

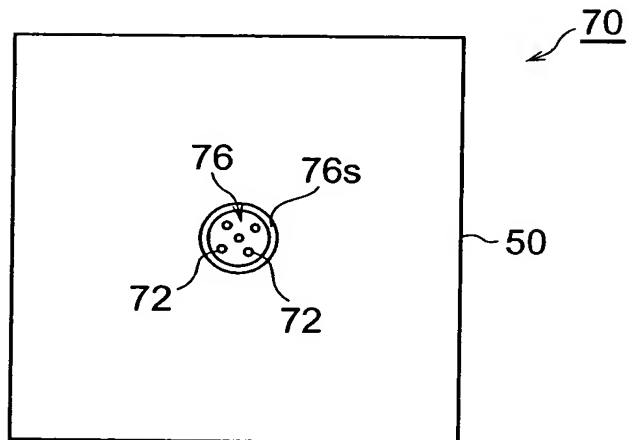


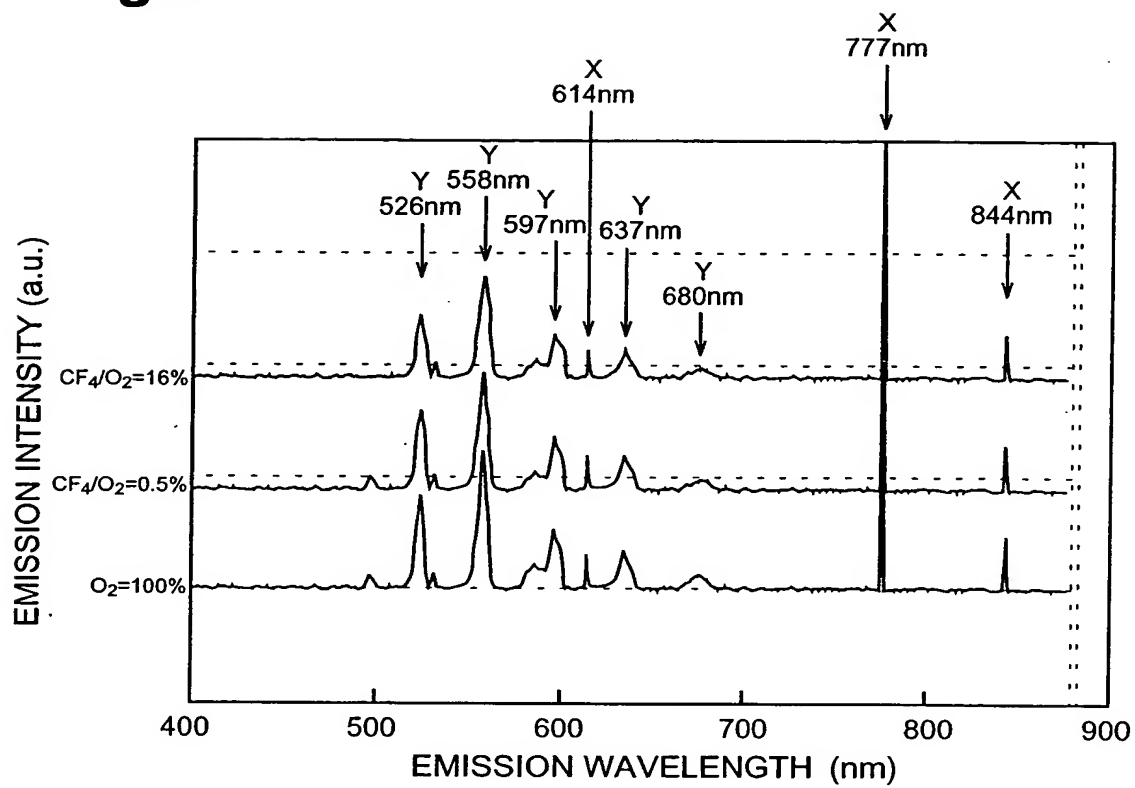
Fig.4

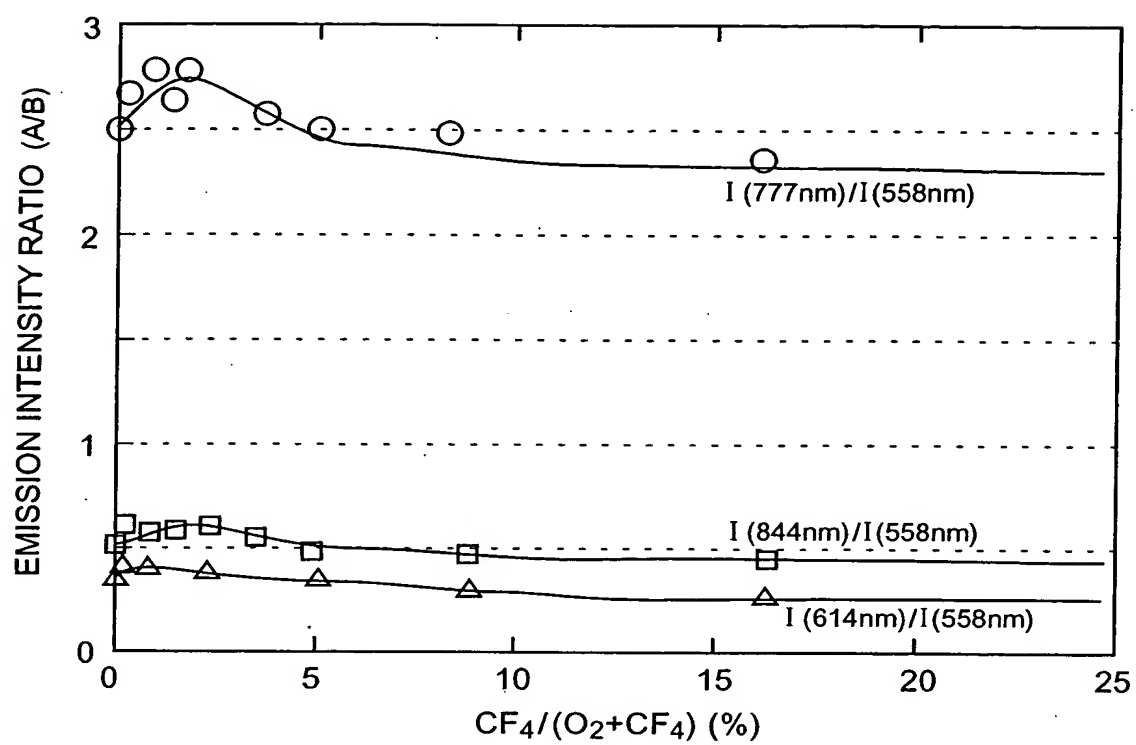
Fig.5

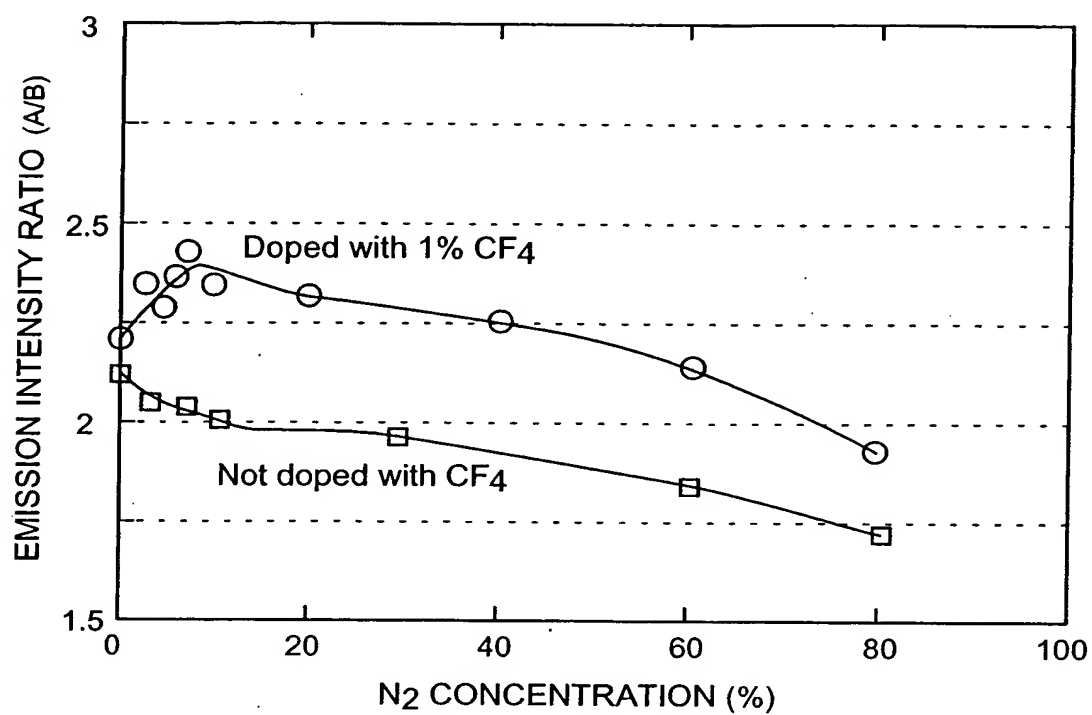
Fig.6

Fig.7

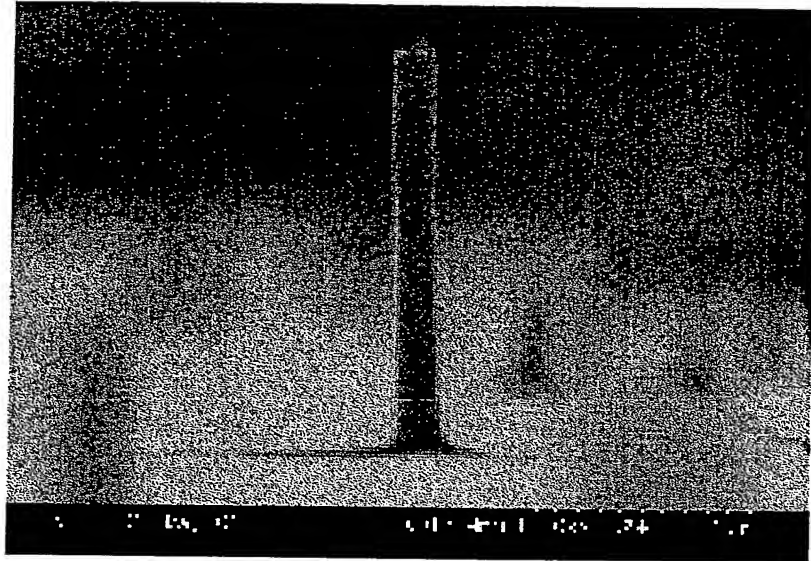


Fig.8

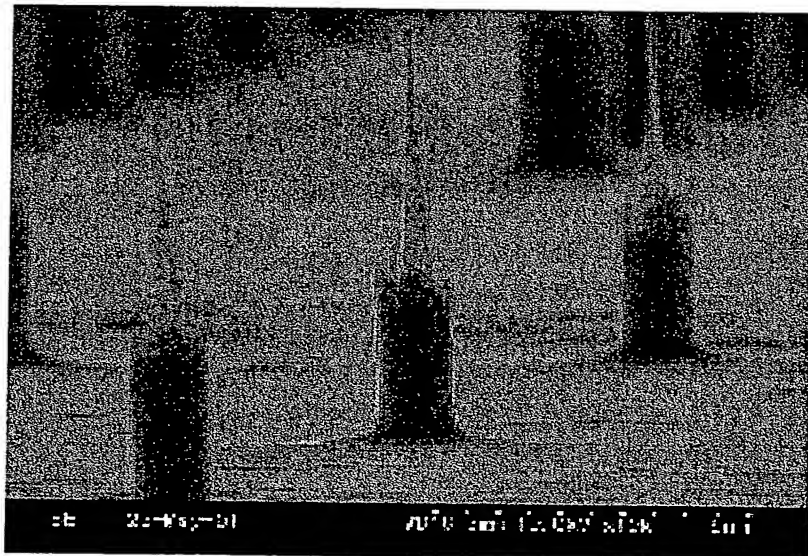


Fig.9

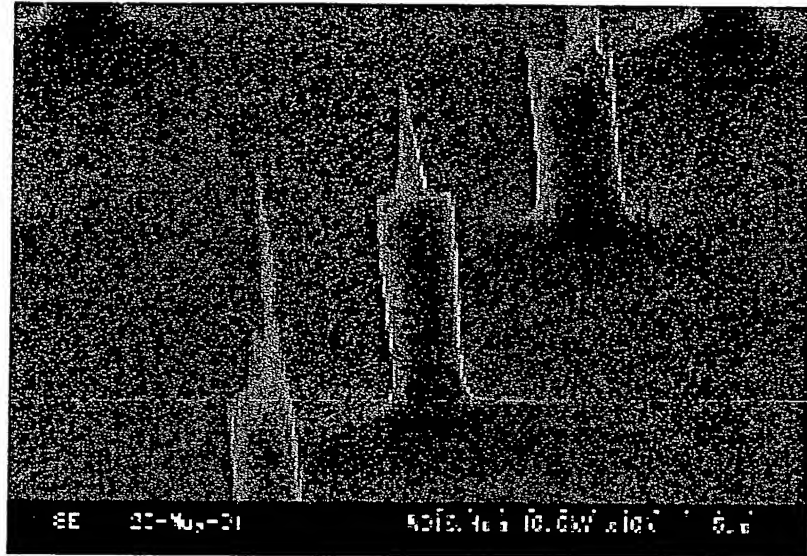


Fig.10

Sample No.	Etching condition							
	CF ₄ / (CF ₄ +O ₂) (%)		C/ (total atms) (%)	F/ (total atms) (%)	O/ (total atms) (%)	Power (W)	Power/ electrode area (W/cm ²)	Pressure (Pa)
Comparative example1	5		2	9	89	200	1.1	5
Example1	3		1	6	93	200	1.1	5
Example2	2		1	4	95	200	1.1	5
Example3	1		0.5	2	97.5	200	1.1	5
Example4	0.1		0.05	0.2	99.75	200	1.1	5
Example5	0.05		0.02	0.1	99.88	200	1.1	5
Example6	0.02		0.01	0.04	99.95	200	1.1	5
Comparative example2	0.01		0.005	0.02	99.975	200	1.1	5
Comparative example3	0(O ₂ ONLY)		0.0	0.0	100	200	1.1	5
Example7	1		5	2	97.5	50	0.28	5
Example8	1		5	2	97.5	80	0.45	5
Example9	1		5	2	97.5	200	1.1	5
Example10	1		5	2	97.5	280	1.6	5
Example11	1		5	2	97.5	200	1.1	0.1
Example12	1		5	2	97.5	200	1.1	40

Fig.11

Sample No.	Surface state	Etching speed (diamond) ($\mu\text{m/h}$)	Etching depth (μm)	Angle of inclination ($^{\circ}$)	Etching speed (mask layer) ($\mu\text{m/h}$)	Etching selection ratio
Comparative example1	○	3	1	72	3	1
Example1	◎	5	10	88	0.28	18
Example2	◎	8	16	89	0.27	30
Example3	◎	10	20	90	0.25	40
Example4	○	9	18	90	0.23	39
Example5	○	8	16	90	0.22	36
Example6	○	7	14	90	0.23	30
Comparative example2	×	3	6	87	0.2	15
Comparative example3	×	1	2	85	0.1	10
Example7	○	1.5	2	78	0.05	30
Example8	◎	3	3	85	0.14	36
Example9	◎	10	20	90	0.25	40
Example10	◎	12	24	90	0.34	35
Example11	◎	9	18	90	0.22	41
Example12	○	10	20	90	0.29	34

Fig.12

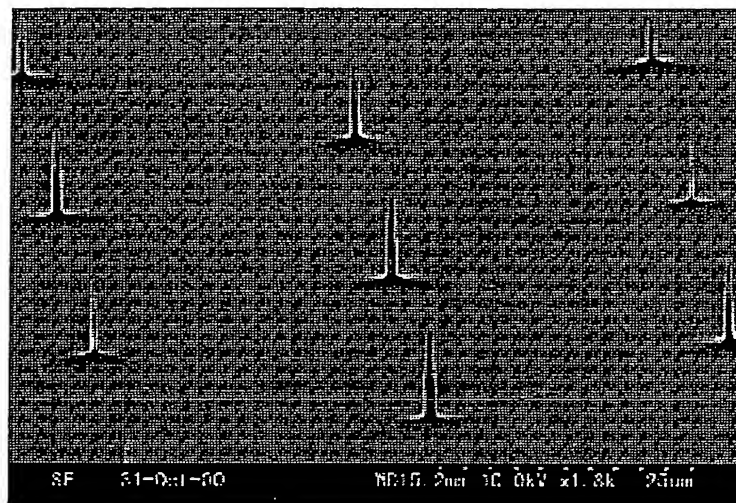


Fig.13

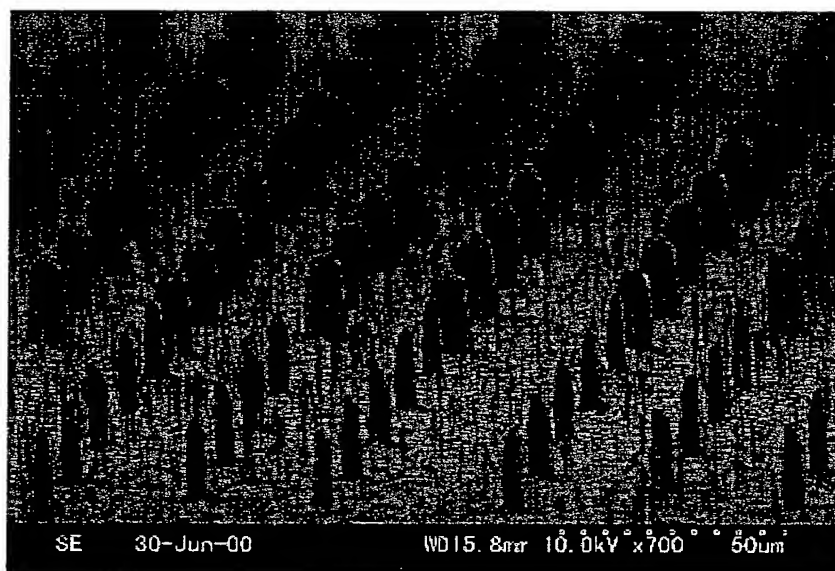


Fig.14A

PRIOR ART

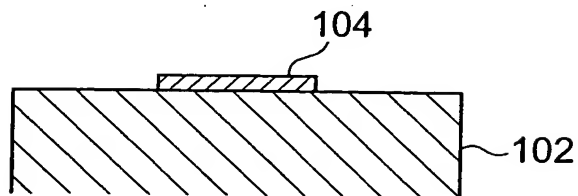


Fig.14B

PRIOR ART

